

## DataMover Lite

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This version of Data Mover Lite (DML) supports file transfers based on protocols: gsiftp, http and https.

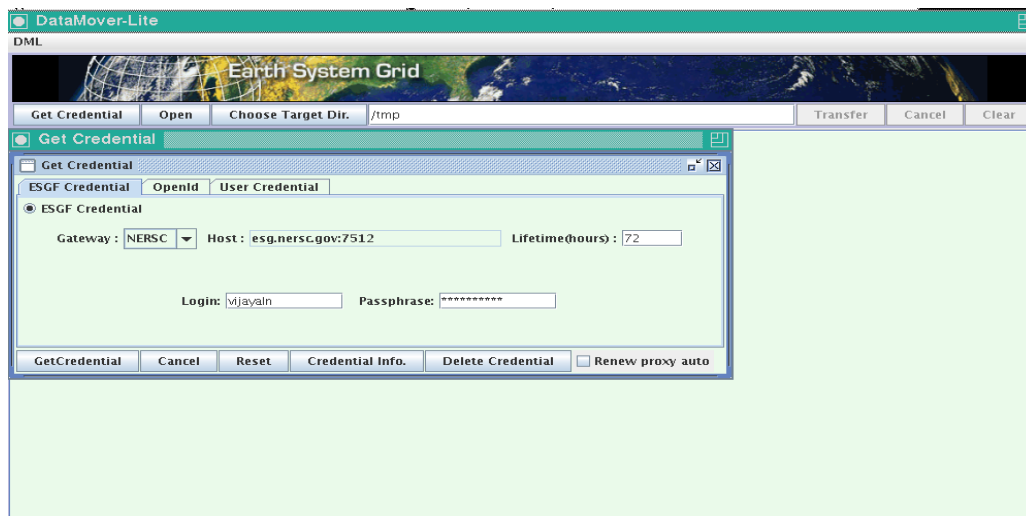
The Webstart enabled DML can be downloaded from the location:

<http://datagrid.lbl.gov/dml3test/jnlp/dml.jnlp>

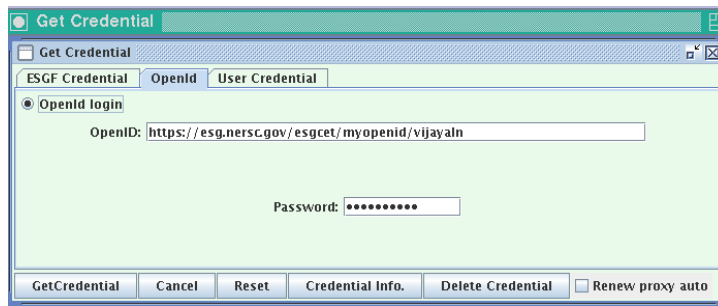
### Instructions:

- **Step 1**

- Open the link <http://datagrid.lbl.gov/dml3test/jnlp/dml.jnlp>. It downloads webstart version of DML to the target machine.
- Click on the “Get Credential” button on the DML main window.
- User may login in one of the two possible ways.
  - User can choose a Gateway from the drop down menu and just login with their username and password.
  - User can choose to login with their OpenId.
- Select a gateway endpoint from the drop down menu. Default lifetime is 72 hours, user can also request a specific credential lifetime. The lifetime granted depends on the configuration of the gateway. NOTE: Some gateways don't grant more than 12 hours.
- Credential is stored at user's local disk and will be reused later for another transfers until its valid lifetime time.



**Figure 1:** A sample screen shot for obtaining ESGF credentials with user login and password.



**Figure 2:** A sample screen shot for obtaining ESGF credentials with OpenId.

- **Step 2**

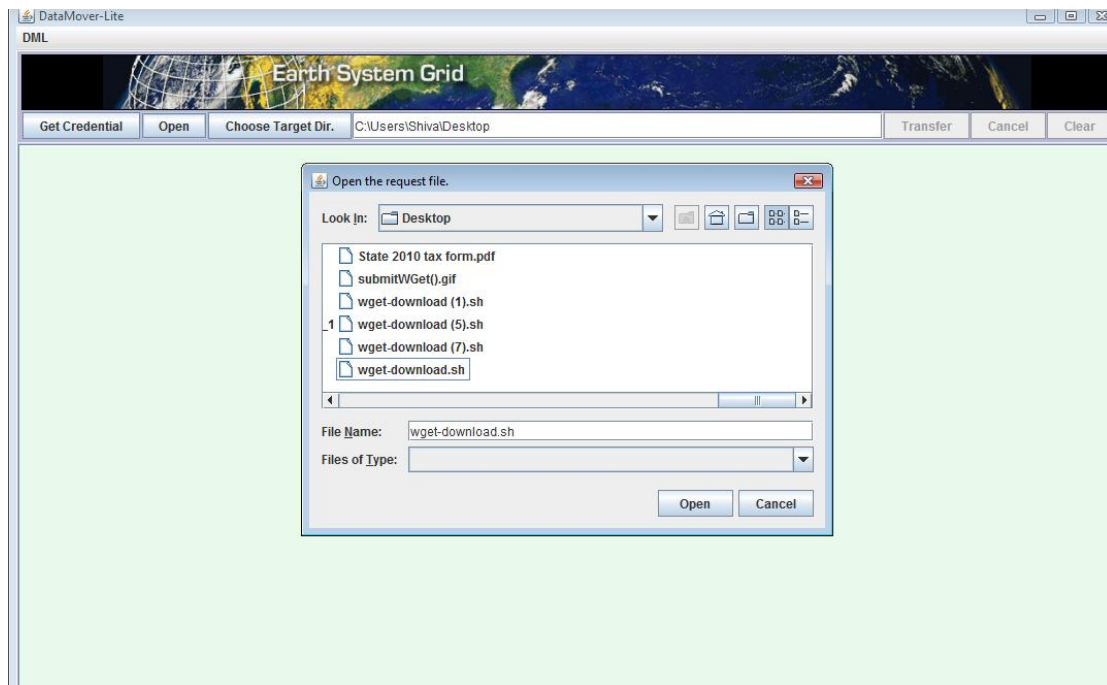
- User downloads the `wget-download.sh` file from the gateway.



**Figure 3:** A sample screen shot for wget script download.

- **Step 3**

- User opens the downloaded `wget-download.sh` file by clicking on the “Open” button from the main DML window. DML parses the file and creates a transfer window.

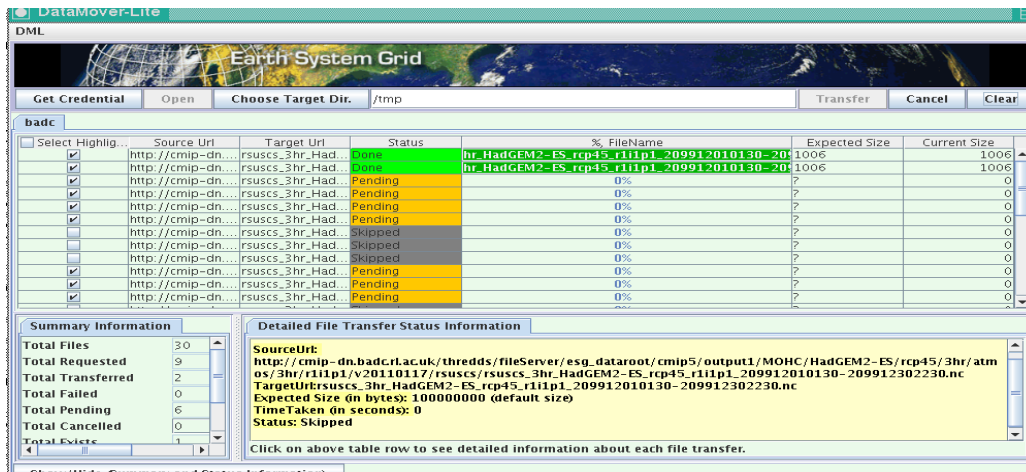


**Figure 4:** A sample screen shot for wget script download.

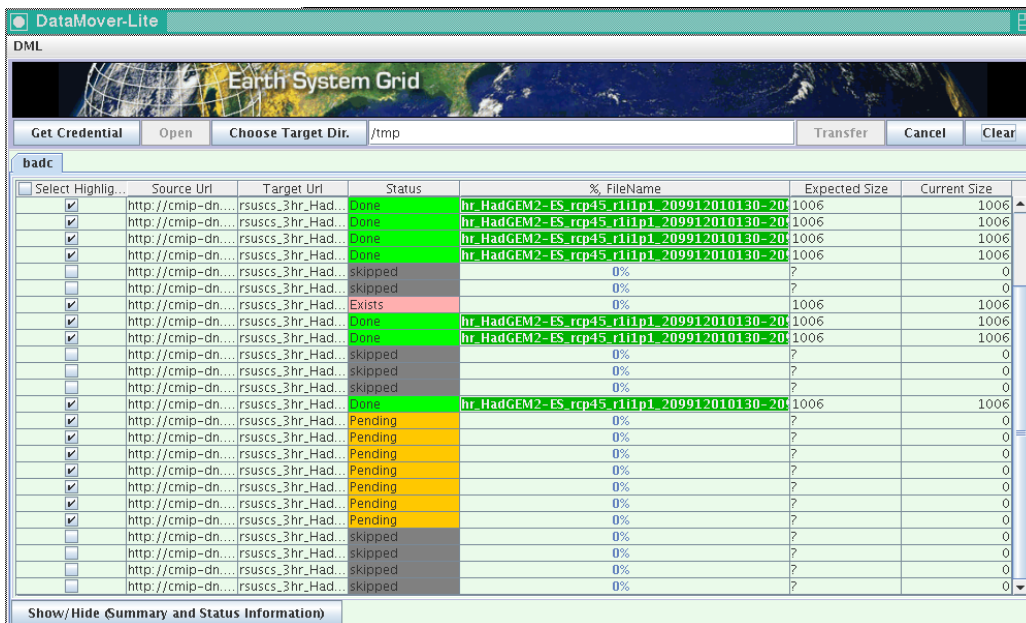
- User clicks on the “Transfer” button on the DML main window. The file is transferred using the credential retrieved previously by the user.

- **Step 4**

- User can either select to download all the files (default behavior) or just a subset of files from the wget-download.sh by marking the checkbox for the file.
- The selected files will be downloaded, and the remaining files are marked as skipped. More files can be added or skipped to the subset during the file transfer. Once the current transfer is done user can transfer more subset(s) of files from the same wget-download.sh.
- Files can be selected either by selecting them individually or contiguous block of files can be selected by Shift+Click.



**Figure 5:** A sample screen shot for downloading first subset of files.



**Figure 6:** A sample screen shot for downloading second subset of files.

- DML can handle only one request at a time. When the transfer is done, user can open up another wget-request.sh or an inputfile.
- If user wants to cancel the request, they can click on the “Cancel” button, DML cancels the request after the current “active” file transfer is done.

## NCAR gsriftp transfers:

- User opens up the DML input file downloaded from the portal. The input file also contains the gateway login endpoint.

```
endpoint=vetswebprod.ucar.edu:7512
gsiftp://vetsman.ucar.edu:2811//datazone/narccap/DATA/CRCM/ccsm-current/table1/spdma
x_CRCM_ccsm_196010106.nc?gateway=ESG-NCAR&authzToken=dcd06a69-7485-42ef-ae15-e52b74
53022f&size=70807184
gsiftp://vetsman.ucar.edu:2811//datazone/narccap/DATA/CRCM/ccsm-current/table1/spdma
x_CRCM_ccsm_1971010106.nc?gateway=ESG-NCAR&authzToken=bcf664a4-9cd3-4941-9189-077cd7
1515ec&size=117836704
gsiftp://vetsman.ucar.edu:2811//datazone/narccap/DATA/CRCM/ccsm-current/table1/spdma
x_CRCM_ccsm_1986010106.nc?gateway=ESG-NCAR&authzToken=d4ea1fbb-9064-42ac-8a49-8cdc6a
3b1e4a&size=117836704
gsiftp://vetsman.ucar.edu:2811//datazone/narccap/DATA/CRCM/ccsm-current/table1/spdma
x_CRCM_ccsm_1991010106.nc?gateway=ESG-NCAR&authzToken=c1582f61-0113-4b51-8c73-d1e09d
14eebd&size=117836704
gsiftp://vetsman.ucar.edu:2811//datazone/narccap/DATA/CRCM/ccsm-current/table1/spdma
x_CRCM_ccsm_1976010106.nc?gateway=ESG-NCAR&authzToken=4a2cd124-d40c-4148-a0dd-77f21b
8bb505&size=117836704
```

- During the transfer DML opens up a dialog box with username/password and retrieves the credential and continues the transfers.

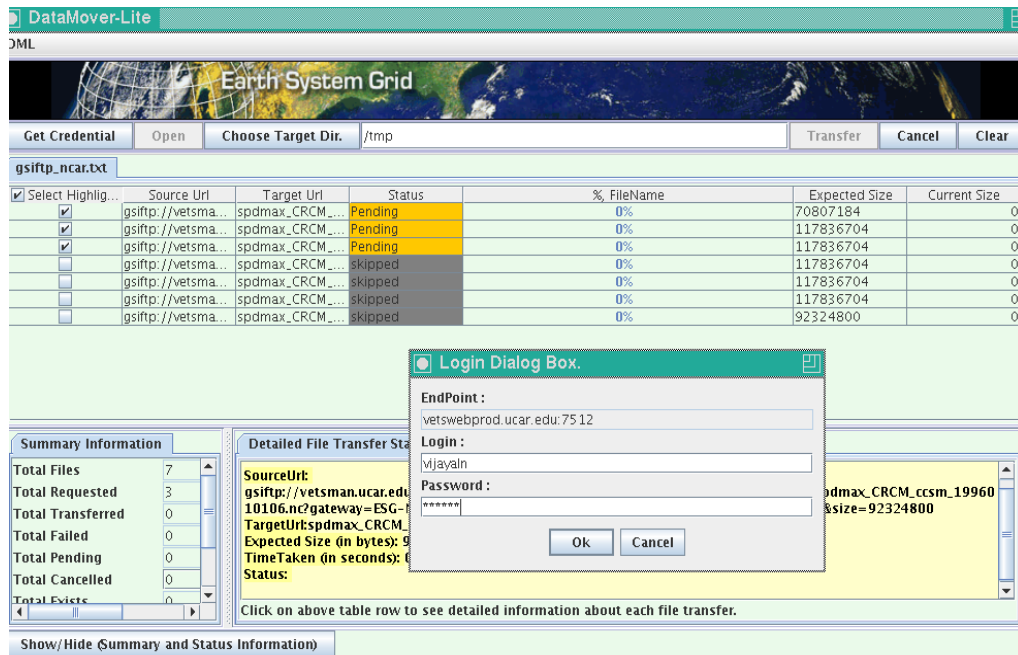
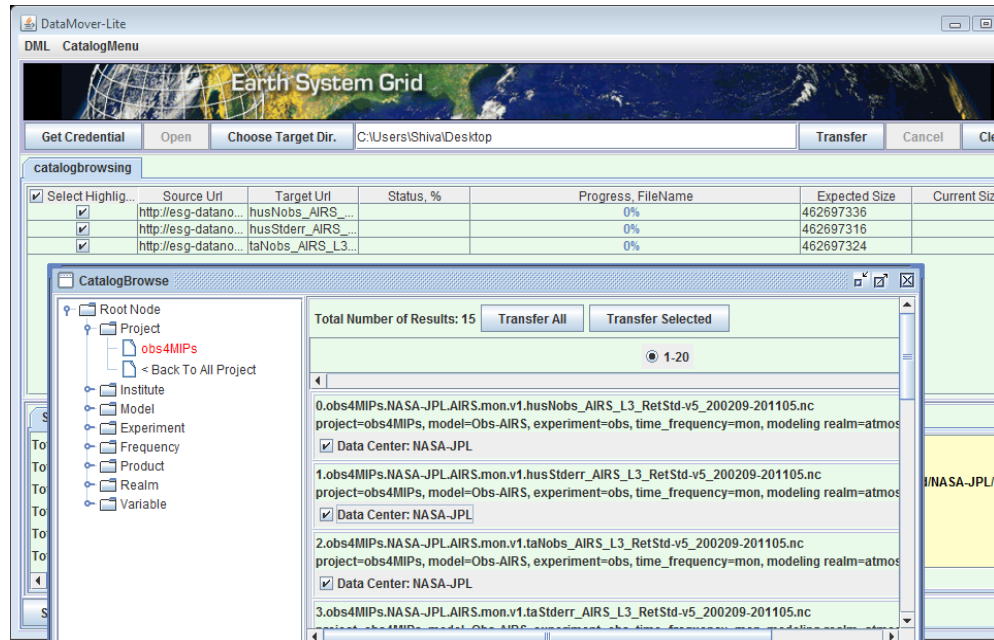


Figure 7: A sample screen shot for downloading NCAR gsiftp files.

## Catalog Browsing Prototype

- Catalog browsing feature is included in this version of DML. Currently, Browsing feature is enabled only for NASA-JPL gateway. Soon we will include browsing capability for other gateways.
- Click on CatalogMenu->BrowseCatalog to bring the catalog browsing window.
- Click on the desired tree node and filter the search. The selected files come on the right side panel.

- Search results are grouped by “20”. “Transfer All” button will move all the files on the right side panel to the transfer window. “Transfer Selected” button will move the selected files from the right side panel to the transfer window. Transfer window will show the source, target, and file size for each files. User can choose again which files they want to transfer among the list, and click “Transfer”.



**Figure 8:** A sample screen shot for catalog browsing

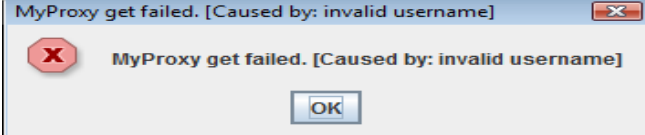
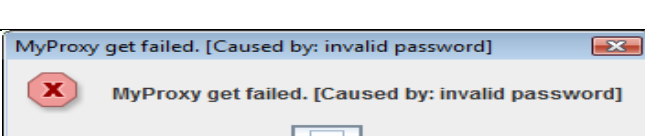
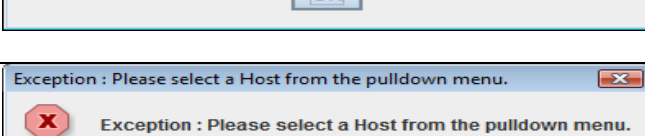
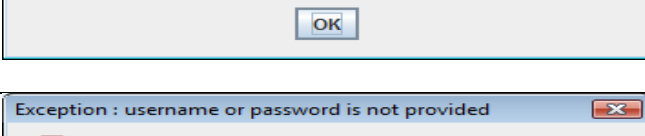
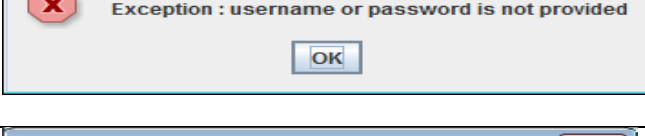
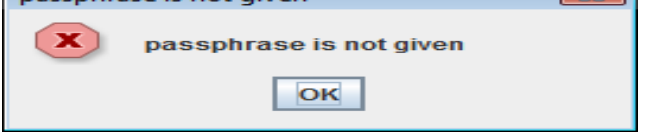
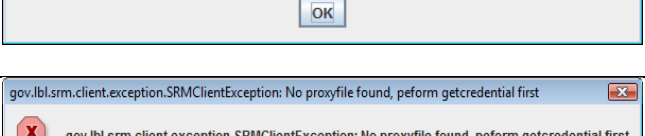
### Limitations in the Catalog Browsing:

Currently we have a limitation in the HTTP transfers. Web start version of DML cannot handle larger files than 450 MB in size. This limitation is because of the virtual memory capacity on the client machine. We are working to go around it in the next release.

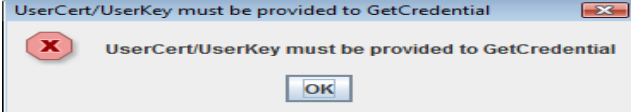
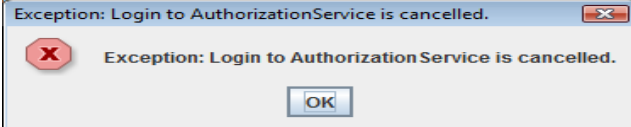
### Table of Messages:

- This table shows Error Messages or Warning Messages that can happen during “GetCredential” process.

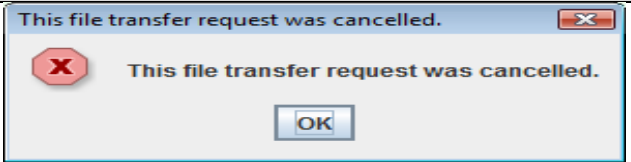
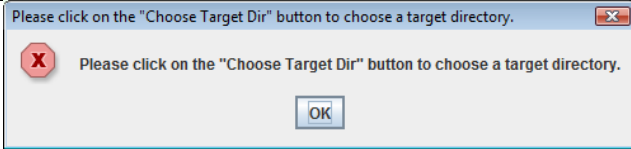
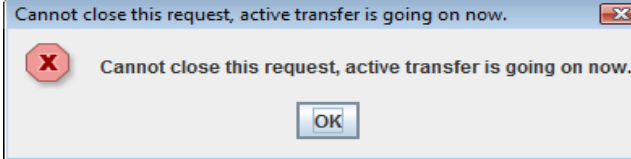
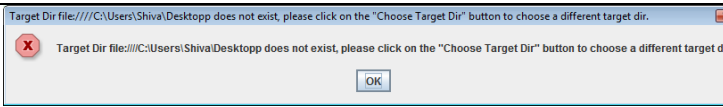
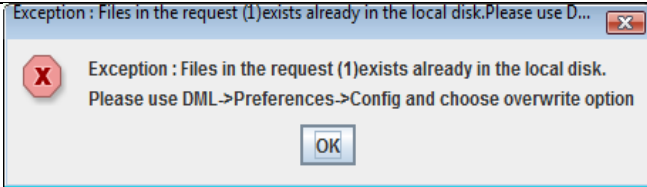
ErrorMessages/WarningMessages	Explanations
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 <p>MyProxy get failed. [Caused by: invalid username]</p> <p>OK</p>	<p>Please check your login username for the selected Gateway host.</p>
 <p>MyProxy get failed. [Caused by: invalid password]</p> <p>OK</p>	<p>Please check your password for the selected Gateway host.</p>
 <p>Exception : Please select a Host from the pulldown menu.</p> <p>OK</p>	<p>User clicked on "GetCredential" button without selecting a Gateway host. Please select a Gateway Host from the pulldown menu.</p>
 <p>Exception : username or password is not provided</p> <p>OK</p>	<p>User clicked on "GetCredential" button without provided username and password. Please provide username and password.</p>
 <p>passphrase is not given</p> <p>OK</p>	<p>Passphrase is not provided to initiate userproxy credential. Please provide the passphrase.</p>
 <p>Login attempt failed for 3 times</p> <p>OK</p>	<p>Login to Gateway host failed for 3 times. Please clear the panel, reopen the near input file and click Transfer again to login again.</p>
 <p>EndPoint info or valid proxypath is not provided. please click "GetCredentials" and obtain a credential. Please Resume transfer after you GetCredential</p> <p>OK</p>	<p>User has tried to transfer the files, without getting the credentials first. Please click on the GetCredential button and retrieve credentials.</p>
 <p>gov.lbl.srm.client.exception.SRMClientException: No proxyfile found, perform getcredential first</p> <p>OK</p>	<p>User clicked on CredentialInfo or DeleteCredential without obtained credential first. Please get credential first.</p>
 <p>Your proxy has only 9 second left. Please use GetCreden...</p> <p>OK</p>	<p>User proxy has only few seconds left, may not be enough for the transfer. Please get your credentials again or renew your userproxy.</p>

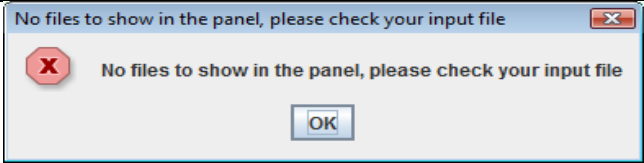


	<p>User selected “userproxy” credential” and clicked on “GetCredential” without providing values for UserCert/UserKey. Please provide values for UserCert and UserKey.</p>
	<p>User decided to cancel to login to the Gateway host Authorization service.</p>

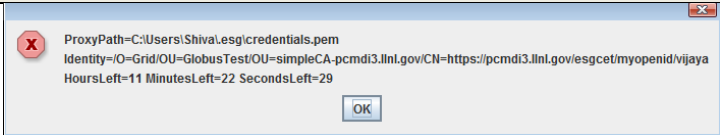
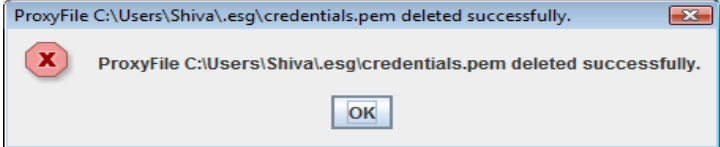
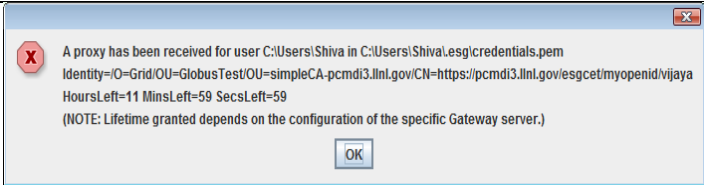
- This table shows Warning Messages or Error Messages that can happen during file transfers.

ErrorMessages/WarningMessages	Explanations
	<p>This current request was already cancelled by the user. If you want to resume please click on the “Clear” button on the top and reopen the wget-download.sh input file and click “Transfer”</p>
	<p>Target Dir is not selected to download files. Please click on the “choose Target Dir” button to choose a target directory on the local machine for downloading files.</p>
	<p>Please wait until the all the files in the request is transferred fully.</p>
	<p>The target dir selected to download files does not exist on the local computer. Choose a different existing target dir.</p>
	<p>All files in this request already exists in the local disk, please use use DML-&gt;Preferences-&gt;Config and choose overwrite option.</p>



	<p>User used a non wget-download.sh file as an input file or incorrect input file. Please check your input file.</p>
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- This table shows other informational messages in DML.

Information Message	Explanations
	<p>Showing users current credential information. This information message is shown after user “clicked” on “CredentialInfo” button.</p>
	<p>User clicked on “Delete Credential” button, message is showing that credential is deleted successfully.</p>
	<p>After a credential is received from the Gateway Host, information about the credential is shown to the user.</p>